## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/003458

According to international Patent Classification (PC) or to both national classification and PC  B. FIELDS SEAGCIED  Minimum documentation searched (classification system followed by classification symbols)  Int. C1. C12N15/09, AcitS1/7088, 31/7105, 38/00, 39/395, 48/00, AcitS1/708, 1/10, 1/21, 5/10, C12P21/02, C12Q1/02, 1/68, G01N33/15, 33/50, 33/68  Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Roho 1922–1996 Jitsuyo Shinan Toroku Koho 1996–2005  Rokai Jitsuyo Shinan Roho 1922–1996 Jitsuyo Shinan Toroku Koho 1996–2005  Rokai Jitsuyo Shinan Roho 1971–2005 Toroku Jitsuyo Shinan Toroku Jitsuyo Shinan Roho 1971–2005  Electronic data base consulted during the international search (name of data base and, where practicable, search serms used)  GenBank/EMBL/DDBJ/GeneSeq/SwissProt/PIR, BTOSIS/MEDLINE/CAPLUS(STN), PubMed  C. DOCUMENTS CONSIDERED TO BE RELEVANT  Category*  Citation of document, with indication, where appropriate, of the relevant passages  Relevant to claim No.  X	Int.Cl7	A. CLASSIFICATION OF SUBJECT MATTER  Int.Cl <sup>7</sup> C12N15/09, A61K31/7088, 31/7105, 38/00, 39/395, 48/00,					
According to International Patent Classification (IPC) or to both estional classification and IPC  B. FIELDS SEARCHED  Minimum documentation searched (classification system followed by classification symbols)  Int. C.I. C.I.2015/09, A61R31/7088, 31/7105, 38/00, 39/395, 48/00, A61R1/700, 17/06, 17/16, 35/00, COIXNA 4/47, 16/18, CIZNI/15, 1/19, 1/21, 5/10, CIZP21/02, CI2Q1/02, 1/68, GOIN33/15, 33/50, 33/68  Decumentation asched of the mainimum documentation to the extent that such documents are included in the fields searched Jitauyo Shinan Roho 1971-2005 Toroku Jitauyo Shinan Roho 1996-2005 Rokai Jitauyo Shinan Roho 1971-2005 Toroku Jitauyo Shinan Tozoku Roho 1996-2005 Rokai Jitauyo Shinan Roho 1971-2005 Toroku Jitauyo Shinan Roho 1996-2005 Rokai Jitauyo Shinan Roho 1971-2005 Toroku Jitauyo Shinan Roho 1996-2005 Rokai Jitauyo Shinan Roho 1971-2005 Toroku Jitauyo Shinan Roho 1996-2005 Rokai Jitauyo Shinan Roho 1971-2005 Toroku Jitauyo Shinan Roho 1996-2005 Rokai Jitauyo Shinan Roho 1971-2005 Toroku Jitauyo Shinan Roho 1996-2005 Rokai Jitauyo Shinan Roho 1971-2005 Toroku Jitauyo Shinan Roho 1996-2005 Rokai Jitauyo Shinan Roho 1997-2005 Rokai Jitauyo Shinan Roho 1997-2005 Rokai Jitauyo Shinan Roho 1998-2005 Rokai Jitauyo Shinan Roho 1997-2005 Rokai Jitauyo Shinan Roho 1998-2005 Rokai Jitau J	A61P17/00, 17/06, 17/16, 35/00, C07K14/47, 16/18, C12N1/15,						
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Int. C.1 C12N15/09, A61R31/7088, 31/7105, 38/00, 39/395, 48/00, A61P17/00, 17/06, 17/16, 35/00, C07R14/47, 16/18, C12P11/15, 1/19, 1/21, 5/10, C12P21/02, C12Q1/02, 1/68, G01N33/15, 33/50, 33/68  Documentation searched other than minimum documentation to the extent that such documents are included in the fields-carobo Kokai Jitsuyo Shinan Koho 1971-2005 Toroku Jitsuyo Shinan Koho 1994-2005  Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  GenBank/EMBL/DDBJ/GeneSeq/Sw1ssProt/FIR, BIOSIS/MEDLINE/CAPLUS(STN), PubMed  C. DOCUMENTS CONSIDERED TO BE RELEVANT  Category* Citotion of document, with indication, where appropriate, of the relevant passages Relevant to claim No.  X	B. FIELDS SEARCHED						
A61817/00, 17/06, 17/16, 35/00, CO7R14/47, 16/18, C12N1/15, 1/19, 1/21, 5/10, C12P21/02, C12D1/02, 1/68, G01N33/15, 33/50, 33/68  Decumentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Koho 1924-2005 Kokali Jitsuyo Shinan Koho 1971-2005 Toroku Jitsuyo Shinan Koho 1924-2005  Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) GenBank/EMBL/DDBJ/GeneSeq/SwissProt/PIR, BIOSIS/MEDLINE/CAPLUS(STN), PubMed  C. DOCUMENTS CONSIDERED TO BE RELEVANT  Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No.  X WO 2002/068628 A1 (Human Genome Science, Inc.), 1-6,8  G. September, 2002 (06.09.02), Seq. ID. 45, 123, 193, 271 & FI 1370651 A1  A WO 2002/06828 A2 (Genentech, Inc.), 1-6,8  January, 2002 (31.01.02), Fig. 156 & EP 1466977 A1 & US 2002/058309 A1  A WO 2001/021658 A1 (Human Genome Science, Inc.), 29 March, 2001 (29.03.01), Seq. ID. 92, 178 & US 2002/068319 A1  X Special categories of cited documents are listed in the continuation of Box C.  Special categories of cited documents are listed on or after the international filing date or price in the continuation of the continuation	Minimum docum	nentation searched (classification system followed by cl	lassification symbols)				
Decumentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1994-2005  Electronic data base and, where practicable, search terms used)  GenBank/EMEL/DDBJ/GeneSeq/SwissProt/PIR, BIOSIS/MEDLINE/CAPLUS(STN), PubMed  C. DOCUMENTS CONSIDERED TO BE RELEVANT  Citegory*  Citation of document, with indication, where appropriate, of the relevant passages  Relevant to claim No.  X	Int.Cl	C12N15/09, A61K31/7088, 31/7	105, 38/00, 39/395, 48/	00 <b>,</b>			
Jitsuyo Shinan Koho Kokai Jitsuyo Shinan Koho 1991–2005 Kokai Jitsuyo Shinan Koho 1991–2005 Toroku Jitsuyo Shinan Koho 1994–2005 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) GenBanK/EMBL/DDBJ/GeneSeq/SwissFrot/PIR, BIOSIS/MEDLINE/CAPLUS (STN), PubMed  C. DOCUMENTS CONSIDERED TO BE RELEVANT  Category  Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No.  X  WO 2002/068628 A1 (Human Genome Science, Inc.), 06 September, 2002 (06.09.02), Seq. ID. 45, 123, 193, 271  A WO 2002/08288 A2 (Genentech, Inc.), 31 January, 2002 (31.01.02), Fig. 156 5 EF 1466977 A1  A WO 2001/021658 A1 (Human Genome Science, Inc.), Seq. ID. 92, 178 6 US 2002/068319 A1  A WO 2001/021658 A1 (Human Genome Science, Inc.), Seq. ID. 92, 178 6 US 2002/068319 A1  **Special casegories of citied documents:  **A document defining the general state of the art which is not considered to be of paticular relevance: the claimed invention cannot be reposited areason (as specifical).  **Special casegories of citied documents:  **Odcument defining the general state of the art which is not considered to be of paticular relevance: the claimed invention cannot be reposited asson (as specifical).  **Odcument of paticular relevance: the claimed invention cannot be reposited asson (as specifical).  **Odcument efferting to an oral disclosure, use, exhibition or other special casson (as specifical).  **Odcument of paticular relevance: the claimed invention cannot be provided asson (as specifical).  **Odcument of paticular relevance: the claimed invention cannot be provided asson (as specifical).  **Odcument of paticular relevance: the claimed invention cannot be provided asson (as specifical).  **Odcument of paticular relevance: the claimed invention cannot be provided asson (as specifical).  **Odcument of paticular relevance: the claimed invention cannot be provided asson (as specifical).  **Odcument of paticular relevance: the claimed i	1/19	, 1/21, 5/10, C12P21/02, C12Q1/	/02, 1/68, G01N33/15, 33	3/50, 33/68			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)   GenBank/EMBL/DDBJ/GeneSeq/SwissProt/PIR, BIOSIS/MEDLINE/CAPLUS (STN), PubMed   C. DOCUMENTS CONSIDERED TO BE RELEVANT   Citation of document, with indication, where appropriate, of the relevant passages   Relevant to claim No.		·					
GenBanK/EMBL/DDBJ/GeneSeq/SwissProt/PIR, BIOSIS/MEDLINE/CAPLUS(STN), PubMed  C. DOCUMENTS CONSIDERED TO BE RELEVANT  Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No.  X							
Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No.  X W0 2002/068628 A1 (Human Genome Science, Inc.), 1-6,8 06 September, 2002 (06,09,02), Seq. ID. 45, 123, 193, 271 & EP 1370651 A1  A W0 2002/08288 A2 (Genentech, Inc.), 1-6,8 31 January, 2002 (31.01.02), Fig. 156 & EP 1466977 A1 & US 2002/058309 A1  A W0 2001/021658 A1 (Human Genome Science, Inc.), 1-6,8 29 March, 2001 (29.03.01), Seq. ID. 92, 178 & US 2002/068319 A1  X Further documents are listed in the continuation of Box C. See patent family annex.  **Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevant permitted and the principle of reloady understand the principle of the ory understand the principle of the	GenBanK/EMBL/DDBJ/GeneSeq/SwissProt/PIR, BIOSIS/MEDLINE/CAPLUS(STN),						
X WO 2002/068628 A1 (Human Genome Science, Inc.), 06 September, 2002 (06.09.02), Seq. ID. 45, 123, 193, 271 & EP 1370651 A1  A WO 2002/008288 A2 (Genentech, Inc.), Fig. 156 & EP 1466977 A1 & US 2002/058309 A1  A WO 2001/021658 A1 (Human Genome Science, Inc.), 1-6,8  4 WO 2001/021658 A1 (Human Genome Science, Inc.), Seq. ID. 92, 178 & US 2002/068319 A1   X Further documents are listed in the continuation of Box C.  See patent family annex.  T' A document defining the general state of the art which is not considered to be of particular relevance the claimed invention cannot be considered on or patent but published on or after the international filing data and not in conflict with the application but cited to understand the principle or theory underlying the invention cannot be considered anovel or cannot published or priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  O' document referring to an oral disclosure, use, exhibition or other special reason (as specified)  O' document referring to an oral disclosure, use, exhibition or other means T' document referring to an oral disclosure, use, exhibition or other special reason (as specified)  O' document referring to an oral disclosure, use, exhibition or other special reason (as specified)  O' document referring to an oral disclosure, use, exhibition or other means T' document incerting to an oral disclosure, use, exhibition or other special reason (as specified)  O' document meterring to an oral disclosure, use, exhibition or other means T' document meterring to an oral disclosure, use, exhibition or other special reason (as specified)  A uthorized officer  Telephone No.	C. DOCUMEN	ITS CONSIDERED TO BE RELEVANT					
A   WO 2002/008288 A2 (Genentech, Inc.),   1-6,8	Category*	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.			
A Wo 2001/021658 A1 (Human Genome Science, Inc.), Seq. ID. 92, 178 We US 2002/068319 A1  * Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance of particular relevance active and provided to the stabilish the publication date of another citation or other means document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other means document published prior to the international filing date but later than the priority date claimed  "Date of the actual completion of the international search 19 April, 2005 (19.04.05)  Name and mailing address of the ISA/ Japanese Patent Office  Facsimile No.  *US 2002/068319 A1  *US 2002/068319 A1  *To later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or floaticular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Yo mobile dependent of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family  Date of the actual completion of the international search 19 April, 2005 (19.04.05)  Date of mailing of the international search report 17 May, 2005 (17.05.05)	Х	06 September, 2002 (06.09.02) Seq. ID. 45, 123, 193, 271		1-6,8			
Seq. ID. 92, 178 & US 2002/068319 A1   See patent family annex.   See patent family annex.   To be patent family annex   See patent family annex   To be patent family a	A	31 January, 2002 (31.01.02), Fig. 156		1-6,8			
Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier application or patent but published on or after the international filing date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed  Date of the actual completion of the international search 19 April, 2005 (19.04.05)  Name and mailing address of the ISA/  Japanese Patent Office  "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention cannot be considered to involve an inventive attended one or annot be considered to involve an inventive attended in evention cannot be considered to involve an inventive attended in evention cannot be considered to involve an inventive attended in evention cannot be considered to involve an inventive attended in evention cannot be considered to involve an inventive attended in evention cannot be considered to involve an inventive attended in evention cannot be considered to involve an inventive attended in evention cannot be considered to involve an inventive attended in evention cannot be considered to involve an inventive attended in evention cannot be considered to involve an inventive attended in evention cannot be considered to involve an inventive attended in evention attended attended in evention attended i	A	29 March, 2001 (29.03.01), Seq. ID. 92, 178	ome Science, Inc.),	1-6,8			
"A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier application or patent but published on or after the international filing date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed  Date of the actual completion of the international search 19 April, 2005 (19.04.05)  Name and mailing address of the ISA/ Japanese Patent Office  Talear document with the apublished after the international filing date on priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention cannot be considered novel or cannot be considered to involve an inventive step when the document is advantaged invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination be considered to involve an inventive step when the document is combined with one or more other such documents, such combination be considered to involve an inventive step when the document is document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is document of particular relevance; the claimed invention cannot be considered novel or can	× Further do	cuments are listed in the continuation of Box C.	See patent family annex.				
19 April, 2005 (19.04.05)  Name and mailing address of the ISA/ Japanese Patent Office  Facsimile No.  17 May, 2005 (17.05.05)  Authorized officer  Telephone No.	"A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier application or patent but published on or after the international filing date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed		date and not in conflict with the application but cited to understand the principle or theory underlying the invention  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art				
Japanese Patent Office  Facsimile No. Telephone No.							
			Authorized officer				

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/003458

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
A	PARK Geon Tae et al., Suprabasin, a Novel Epidermal Differentiation Marker and Potential Cornified Envelope Precursor, J.Biol.Chem., Vol.277, No.47, 45195-45202 (2002)	7		
А	OOMIZU, Souichi et al., Kdap, a novel gene associated with the stratification of the epithelium, Gene, Vol.256, 19-27(2000)	7		
А	KOMIYA, Tohru et al., A Large-Scale in Situ Hybridization System Using an Equalized cDNA Library, Anal.Biochem., Vol.254, 23-30 (1997)	13-16		
P, X	MOFFATT P. et al., Identification of a conserved cluster of skin-specific genes encoding secreted proteins, Gene, Vol,334, 123-131(2004)	1-16		
Р,Х	MATSUI, Takeshi et al., Identification of novel keratinocyte-secreted peptides dermokine- $\alpha/-\beta$ and a new stratified epitheliumsecreted protein gene complex human chromosome 19q13.1, Genomics, Vol.84, 384-397 (2004)	1-16		
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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/003458

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:  1.   Claims Nos.: 17-20  because they relate to subject matter not required to be searched by this Authority, namely:  Claims 17 to 20 pertain to diagnostic methods to be practiced on the human body or animal body and thus relate to a subject matter which this International Searching Authority is not required, under the provisions of the PCT Rule 39.1(iv), to search.  Claims Nos.:  because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
<ol> <li>As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.</li> <li>As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.</li> <li>As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:</li> </ol>
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  Remark on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.